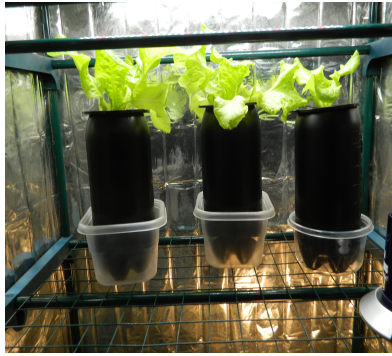


Kratky Hydroponics



Unlike traditional hydroponic systems, Kratky doesn't use air pumps. As the plants use the water with nutrients, the plants put off air-collecting hair roots.



What you need: a container, net cups: \$10, rock wool: \$9, clay pebbles: 4 lb, \$18, . Grow light, \$25. All available from Amazon. Nutrients: Ebay, \$23. After my initial purchases, I have not had to make any more. I am using a small greenhouse that I had already. I covered it with a space blanket to reflect light and keep heat in. I run the grow light on a timer for 18-hours/day. My greenhouse is in a workroom that gets no sun.

Most people use storage tubs for Kratky. My pics show that I used painted soda bottles. The paint is necessary to keep light out so that the water doesn't turn to algae. I decided to go with the soda bottles for weight reasons in my little greenhouse. I cut the tops out for the net cups. I decided to go with a tub for strawberries. I covered my strawberry tub with paper instead of paint. Instead of cutting holes in the tub lid as most do, I used a “donated” plastic for sale sign. Anything to keep light out.



Next, nutrients. Masterblend, Calcium Nitrate, and Epsom Salt. They go a long way. The water has to be free of chlorine. If you are on city water like me, just fill a container and let it set out overnight, the

chlorine will off-gas. Chloramine will have to be filtered out. Well water or captured rain water is good as-is. Some purchase expensive PH meters to check the PH of their water. Lettuce likes it high, I checked it once with a pool/hot-tub test strip, it looked good, so I have ignored that since.

The net pots, shown in the pictures hold the rock wool cubes that hold your seedlings in place. I tried putting the seedlings in a net pot and let the clay pebbles hold the plant and that worked too, no need for rock wool. You can sprout your seeds in the rock wool if you want, or start them in soil, then transfer to the rock wool. The clay pellets keep light out from the top. The clay pellets are reusable, just rinse them and let them dry in the sun after use.



Rock Wool Cubes



When you have sprouted your seedlings in soil and they have some roots, transfer to the net pots. Your containers have to be filled to the top of the net cups, plus 1/4 ". In other words, the water comes up into the net cups 1/4". This is where the magic happens. As the roots soak up the water/nutrients, the roots will be exposed to air. The plants put off roots to take up air. This is why you don't need air pumps. With lettuce, by the time the water is soaked up, your lettuce will be ready. This winter, I trimmed off leaves as needed, topped off the water, and let them grow back.

The only difficulty in is the system initial setup. The tub I am using is for strawberries. Both lettuce and strawberries like cooler weather, that's why I chose them. I will have to pollinate the strawberry flowers with a q- tip. Not necessary with lettuce.



My sprouting tray. Ice cub tray with drilled holes for drainage into the lower tray without holes.